

FRACTIONS WORKSHEET

Least Common Denominator:

Find the least common denominator for each pair:

$$\text{a) } \frac{1}{6} \text{ and } \frac{2}{5}$$

$$= 30$$

$$\text{b) } \frac{3}{7} \text{ and } \frac{1}{4}$$

$$= 28$$

$$\text{c) } \frac{4}{9} \text{ and } \frac{5}{12}$$

$$= 36$$

$$\text{d) } \frac{7}{10} \text{ and } \frac{8}{15}$$

$$= 30$$

Determine the least common denominator for each set of fractions:

$$\text{a) } \frac{3}{10}, \frac{4}{5}, \frac{1}{2}$$

$$= 10$$

$$\text{b) } \frac{9}{4}, \frac{3}{8}, \frac{1}{3}$$

$$= 24$$

$$\text{c) } \frac{24}{25}, \frac{49}{50}, \frac{37}{100}$$

$$= 100$$

$$\text{d) } \frac{8}{9}, \frac{5}{8}, \frac{5}{12}$$

$$= 72$$

Lowest Terms:

Simplify the fractions by reducing

$$\text{a) } \frac{20}{40} \div 20$$

$$= \frac{1}{2}$$

$$\text{b) } \frac{75}{125} \div 25$$

$$= \frac{3}{5}$$

$$\text{c) } \frac{33}{88} \div 11$$

$$= \frac{3}{8}$$

$$\text{d) } \frac{36}{720} \div 36$$

$$= \frac{1}{20}$$

Adding and Subtracting Fractions:

Remember to check for common denominators!!

$$\text{a) } \frac{2}{3} + \frac{1}{6}$$

$$= \frac{4}{6} + \frac{1}{6}$$

$$= \frac{5}{6}$$

$$\text{b) } \frac{3}{10} + \frac{1}{2}$$

$$= \frac{3}{10} + \frac{5}{10}$$

$$= \frac{8}{10} \div 2$$

$$= \frac{4}{5}$$

$$\text{c) } \frac{1}{4} + \frac{2}{5} + \frac{1}{10}$$

$$= \frac{5}{20} + \frac{8}{20} + \frac{2}{20}$$

$$= \frac{15}{20} \div 5$$

$$= \frac{3}{4}$$

$$\text{d) } \frac{5}{12} + \frac{1}{6} + \frac{1}{4}$$

$$= \frac{5}{12} + \frac{2}{12} + \frac{3}{12}$$

$$\text{e) } \frac{3}{4} - \frac{3}{5}$$

$$= \frac{15}{20} - \frac{12}{20}$$

$$\text{f) } \frac{5}{6} - \frac{1}{3}$$

$$= \frac{5}{6} - \frac{2}{6}$$

$$= \frac{10}{12} \div 2$$

$$= \frac{5}{6}$$

$$= \frac{3}{20}$$

$$= \frac{3}{6} \div 3$$

$$= \frac{1}{2}$$

$$\begin{aligned} \text{g) } & \frac{11}{12} - \frac{3}{4} \times 3 \\ & = \frac{11}{12} - \frac{9}{12} \\ & = \frac{2}{12} \div 2 \\ & = \frac{1}{6} \end{aligned}$$

$$\begin{aligned} \text{h) } & \frac{8}{10} - \frac{2}{5} - \frac{1}{2} \times 5 \\ & = \frac{8}{10} - \frac{4}{10} - \frac{5}{10} \\ & = \frac{-1}{10} \end{aligned}$$

$$\begin{aligned} \text{i) } & \frac{2}{3} - \frac{1}{6} \\ & = \frac{4}{6} - \frac{1}{6} \\ & = \frac{3}{6} \div 2 \\ & = \frac{1}{2} \end{aligned}$$

Multiplying and Dividing Fractions: Remember the trick to dividing!!!

Express answers in lowest terms.

$$\begin{aligned} \text{a) } & \frac{5}{9} \times \frac{2}{7} \\ & = \frac{10}{63} \end{aligned}$$

$$\begin{aligned} \text{b) } & \frac{2}{15} \times \frac{3}{10} \\ & = \frac{6}{150} \div 6 \\ & = \frac{1}{25} \end{aligned}$$

$$\begin{aligned} \text{c) } & \frac{9}{20} \times \frac{4}{5} \\ & = \frac{36}{100} \div 4 \\ & = \frac{9}{25} \end{aligned}$$

$$\begin{aligned} \text{d) } & \frac{2}{5} \times \frac{3}{4} \times \frac{1}{2} \\ & = \frac{6}{40} \div 2 \\ & = \frac{3}{20} \end{aligned}$$

$$\begin{aligned} \text{e) } & \frac{2}{9} \div \frac{5}{6} \\ & = \frac{2}{9} \times \frac{6}{5} \\ & = \frac{12}{45} \div 3 \\ & = \frac{4}{15} \end{aligned}$$

$$\begin{aligned} \text{f) } & \frac{3}{10} \div \frac{2}{5} \\ & = \frac{3}{10} \times \frac{5}{2} \\ & = \frac{15}{20} \div 5 \\ & = \frac{3}{4} \end{aligned}$$

$$\begin{aligned} \text{g) } & \frac{5}{12} \div \frac{7}{10} \\ & = \frac{5}{12} \times \frac{10}{7} \\ & = \frac{50}{84} \div 2 \\ & = \frac{25}{42} \end{aligned}$$

$$\begin{aligned} \text{h) } & \frac{10}{5} \div \frac{6}{15} \\ & = \frac{10}{5} \times \frac{15}{6} \\ & = \frac{150}{30} \div 30 \\ & = 5 \end{aligned}$$

$$\begin{aligned} \text{i) } & \frac{2}{5} \times \frac{1}{4} \div \frac{1}{2} \\ & = \frac{2}{5} \times \frac{1}{4} \times \frac{2}{1} \\ & = \frac{4}{20} \div 4 \\ & = \frac{1}{5} \end{aligned}$$